

Eco-Transport: A Fusion of Economy and Ecology for Your Car

By Ryan Forbess and Nancy Dorman

Given the skyrocketing price of gasoline these days, why would anyone choose to squander it? Unfortunately, most people waste fuel without even knowing it. Are you looking for ways to decrease your gasoline use and save money? By changing your driving habits you can squeeze every possible mile out of a tank. This will not only help your pocketbook, but it also improves air quality. We all know that vehicle exhaust is a leading source of hazardous air pollution. So the less fuel you burn, the better it is for everyone!

All cars are capable of achieving better gas mileage. It mostly depends on "how" you drive. Most of us just get in the car, push the pedal and go! But there are several simple things that you can do that will help improve air quality while saving you money.

Here are some tips to help you improve fuel efficiency.

Watch your tire pressure. Under inflated tires have more flex, but reduce fuel economy because there is more rolling resistance or drag. Always inflate tires to the PSI stated on the sidewalls. This is the pressure recommended by the tire manufacturer. Buy a tire gauge and check the pressure every week or each time you refuel your car.

Accelerate slowly. Rabbit starts are a killer of fuel economy.

Plan your trip. Consolidate your errands and make your first stop the farthest away to allow your vehicle's engine to warm up before you have to turn it off. A cold engine will consume more fuel because it hasn't reached the optimal operating temperature. If you park facing out, it is easier to get into the flow of traffic as soon as possible. This saves gas because your engine is running as little as possible.

Know the road ahead. Anticipate traffic flow and signals. Be careful about taking the shortest route if there is the potential for stop-and-go traffic. Plan ahead for stops. Drive as if you have no brakes, coasting to a gentle stop. Look for traffic lights as far ahead as possible. If it's been red for a long time, just slowing down a little could put you at the light just as it turns green. Avoid speeding, rapid acceleration and braking which decrease fuel efficiency.

Do not idle. Turn off your car when stopped for more than 20 seconds. Modern cars that are fuel-injected use no more fuel to restart than if the car had been idling for the same time period.

Watch your highway speeds. Try to drive at or safely below the speed limit. Even driving at the speed limit you are probably going to be the slowest car on the road, so try to drive as close to the white line, or fog line, as possible. This makes your car stand out because it appears "out of the ordinary" with everyone else. That signals an approaching driver to go around. Remember: Speed is the enemy of fuel efficiency! The U.S. Department of Energy says gas mileage plummets above 60 mph.

Travel light. Clean out the trunk. Remove unnecessary cargo and cargo racks. The extra weight reduces fuel efficiency.

Use technology. Get a "Scan Gauge" if you want to get serious. It tracks each trip's mileage, speed, throttle position, engine temperature, revolutions per minute and many more of your car's settings. Tracking these variables will help you find the "sweet spot" for the best mileage your car can achieve.

For more information about fuel efficiency, check out www.fueleconomy.gov or www.cleanmpg.com.

(Ryan Forbess is a park planner for Tennessee State Parks and formerly worked as a park ranger at Montgomery Bell State Park. Nancy Dorman is the director of planning for Tennessee State Parks.)



Using eco-transport techniques, Ryan Forbess can get 28 mph in this 2003 Ford Explorer that is rated at 17 mph.
Photo by Ryan Forbess

Changing My Driving Habits

By Ryan Forbess

Even with gas prices so high, I look forward to my next fill up. It's a contest: a chance to see how many miles I can squeeze out of every tank. On each trip to the store, no matter how short, I attempt to get the best possible gas mileage. In the past few months, I'm averaging around 60 mpg in my 2004 Toyota Prius.

How is this possible? I am one of the growing numbers of people who modify their driving habits to achieve the highest fuel efficiency possible. Just a few months ago, I was just like any other person on the road. My personal car was a fuel sucking Dodge Ram Hemi. I drove fast, accelerated quickly, basically driving like everyone else. The gas prices pushed me to sell my truck. A couple \$80 fill-ups left me to question: do I really need this vehicle? So I sold one of the most fuel inefficient vehicles for the one of the best, a Toyota Prius.

The first thing most people ask is what you have done to make it produce such high numbers? Nothing, it's a completely stock Toyota Prius. The secret is easy, it's just good defensive driving and not trying to race to your next destination. Everything that needs to be done to get better mileage isn't in the next gadget you find on the Internet but in the driver's head and knowledge of the road.

After several months of driving the Prius and getting good results, I decided to see how many miles I could get out of one tank of gas. Using all the tips in this article and deciding on the most fuel efficient route to take, I started focusing on high miles and mileage. No A/C. No unnecessary stops. No extra cargo. No idling. No speeding. No talking on the cell phone. Just complete focus on the road and those around you.

After three weeks of driving and a little luck I finally reached 1,002 miles for a total of 80 mpg. During those three weeks I would go to work and drive my state vehicle which is a Ford Explorer 4WD. When a person switches from a hybrid vehicle to a conventional gas vehicle, you just don't turn off those techniques. The things you have learned and the driving habits you have built up over time become how you drive.

The Ford Explorer is rated by the EPA for a combined 16.5 mpg, but I was able to push my average over the last three months to 28 mpg. One tank even reached a high of 33 mpg. Most of the increase came from using my head and not idling while speaking to park visitors. Most of all I reduced my speed. You don't have to have a hybrid car to save gas. Just change your methods, and possibly your route, and the mileage will go up.

For various reasons some of us still require an SUV for our job or personal life. You may have a large family or have a need for the covered cargo space that the SUV provides. The Ford Escape Hybrid is available now and has a great track record for providing the added space of an SUV and the fuel efficiency of a hybrid system.

So how is the added cost of a hybrid system made up in fuel savings? A common SUV like the Dodge Durango or Ford Explorer is rated around 17 mpg. If a person drives 15,000 miles a year and is buying gas at \$4 a gallon, you are spending \$3,500 a year on fuel. That's \$294 a month that you have spent on gasoline.

The Ford Escape Hybrid is rated at 31 mpg, which would use \$1,950 a year in fuel, or \$161 a month. That's \$133 a month less on fuel.

The impact of this savings is compounded if a company has a fleet of SUVs. Fifty SUVs that were converted to a hybrid platform would save \$80,000 a year. Every drop of gas counts, and with today's prices you will see a huge savings at the pump.